

KALESNIKOFF

TIMBER INSPIRES



Cutting Permit K089 – Airey Face Patch Cut Harvest Plan Information and Feedback Form May 17, 2021

Introduction: Airey Face Landform in the West Arm of Kootenay Lake

Kalesnikoff Lumber operates in several areas along the north shore of Kootenay Lake's west arm. The north shore area typically has warm and dry face units in between significant mountain streams that run generally from north to south into the lake. Airey Face lies between Sitkum and Duhamel Creeks, just past Six Mile as you head east from Nelson. The face is bisected by Airey Creek, a small but steep drainage that emerges as a spring somewhere between 1000m and 1200m in elevation and flows directly into Kootenay Lake rather than entering into either of the larger watersheds to the east and west. In 2015, the Sitkum Duhamel wildfire burned a large portion of the Airey Creek basin and adjacent face unit, reaching up to the ridge top and a significant distance to the west, into the Duhamel Creek catchment. Kalesnikoff was able to salvage some of the burned timber after the fire on the east side of Airey Creek.

Over the past few years, Douglas-fir bark beetle infestations have rapidly increased within the west arm, and Airey Face is beginning to show significant attack at this time. Neighbouring areas on the north shore are in a similar or even worse condition, and the populations of this insect are generally now out of control within the West Kootenays. Epidemic levels of this forest pest are of concern due to the potential impacts to wildfire risk, ungulate winter range, timber value, visual quality, terrain stability, hydrological and ecological function, and other forest values. The high proportion of mature Douglas-fir growing on hillsides along the west arm means this issue will likely persist for some time, with a significant effect on local forests.

Kalesnikoff is proposing Cutting Permit (CP) K089 under our Forest License A30172. K089 consists of a series of small patch cuts on the east side of Airey Face. The purpose of this document is to provide information for review and feedback by local stakeholders, Indigenous communities, and the interested public.

Who We Are:

About Kalesnikoff:

Kalesnikoff Lumber Company is a local, fourth-generation family-owned company based in Thrums, B.C. We have lived and worked in the west Kootenays for over 80 years and care about our local communities and our employees, contractors and suppliers who we consider extended family.

We create our plans and make decisions based on local knowledge of our forests, environment, communities, and on evolving best practices in sustainable forestry. We live here, and our forestry and business practices reflect our ongoing pride in our legacy of taking care of the land and people in our area. We are committed to making the most of every tree we plant, harvest and process — striving to create the most benefit for our employees, the community and our customers.

We're trying to improve on how we work with local communities in advance of harvest operations to better understand their priorities, concerns and interests, and we develop our final harvest plans based on community input as well as technical, regulatory and environmental considerations.

Our Commitment:

Kalesnikoff will:

- a) adhere to government regulations and guidelines when planning and conducting harvesting activities.
- b) adhere to the results and strategies described within our approved Forest Stewardship Plan, available on our website, at <https://www.kalesnikoff.com/>
- c) carefully consider the various risks of our harvesting activities and seek the advice of third-party qualified registered professionals as necessary throughout our planning process.
- d) utilize the most up-to-date imagery and technology available to help draft operational plans.
- e) prepare detailed drainage plans where necessary.
- f) use modern road building practices with attention to maintaining natural drainage patterns.
- g) use environmentally sound timber harvesting practices.
- h) carry out monitoring and maintenance of roads and structures on a regular basis to avoid issues that may be caused by weather events or improperly functioning drainage structures.
- i) carry out reforestation of harvested areas in a timely fashion, with an appropriate species mix which considers site-specific conditions and climate change variables.
- j) operate in a manner that limits environmental impact, prevents pollution, and protects the health and safety of our employees, contractors and the public.
- k) incorporate scientific discovery, government direction, public feedback, and local knowledge to reduce our environmental footprint and help further the public interest by continuously improving the sustainability of our operations over time.
- l) engage with Indigenous peoples, local communities and the public in an open and transparent manner.

How this Public Referral Document Works:

Kalesnikoff Lumber Company has developed a proposed harvest plan for Airey Face. This plan will result in the application for Cutting Permit (CP) K089, which will be applied for under our Kootenay Lake Forest License (FL A30172), which provides timber rights on provincial Crown lands. We are sharing this plan with Indigenous peoples, stakeholders and the local community to provide information about key factors we've identified and considered, the proposed harvest areas and other identified forest values, as well as to seek your feedback and input on other information you believe should be considered.

Please review the proposed harvest plan and related information in this document, then feel free to provide your input in the section marked "**FEEDBACK FORM**" by **June 21, 2021**. This document and the Feedback Form will also be posted on the Forest Stewardship page of our website at the following address: <https://www.kalesnikoff.com/sustainable-forest-stewardship>. It can be completed and emailed to referrals@kalesnikoff.com, mailed to PO Box 3000 Hwy 3A, Thrums BC, V1N 4N1 or a hard copy dropped off at our main office at 2090 Hwy 3A in Thrums. You can also share your input by simply emailing comments or questions to the same address or by calling our office at 1-250-399-4211, extension 231 for Gerald Cordeiro, our Forest Development Manager.

If you'd like to receive email updates regarding this proposal and plan, or any of our other activities in your specific area of interest, please provide your email address and contact information in the Feedback Form, or email it to referrals@kalesnikoff.com. Please tell us briefly who you are, and advise if you hold a water license or other tenure rights on Crown land, plus any other information you think could be important. Thank you

About the Proposed Airey Face Harvest Plan:

Access and Infrastructure Requirements

CP K089 is accessed via an existing road network that has been in place for many years. The main road saw minor upgrades after the 2015 Sitkum Duhamel fire in order to salvage burned timber. Two older spur roads off the main road will require minor reactivation to return them to a safe standard for log hauling, but no new road construction is required to access this block. A number of existing old trails plus several new trails will be used to bring timber to roadside.

Harvest Method

This proposal is a relatively small-scale patch cut, consisting of 23 openings totalling 10.2ha in size (average patch size is 0.4ha). To put this in perspective, the maximum allowed cutblock size in our forest region is 40ha, so each individual opening is 1/100th of the maximum allowed area, and the total of all harvest areas is approximately 1/4th the size of the maximum single opening. That being said, we still need to recognize the potential for cumulative impacts of small openings in relation to various ecosystem services, so in this case the total scope of the plan has been limited in order to protect non-timber forest values that will be described in greater detail later in this document. Harvest areas will see timber removed by conventional ground-based equipment, mostly operating on existing trails, with a few new trails to be added.

Specific Planning Requirements and Considerations for the Airey Face Area:

Careful consideration must be given to a variety of forest values across in any harvest planning exercise. The Forest and Range Practices Act (FRPA) identifies 11 primary forest values to be considered, in no specific order, as follows:

- Biodiversity
- Cultural Heritage
- Fish/Riparian
- Forage and Associated Plant Communities
- Recreation
- Resource Features
- Soils,
- Timber
- Visual Quality
- Water
- Wildlife

In addition to the identified FRPA values, we apply several other lenses to our proposed developments. Wildfire resilience features prominently in our planning processes now, as well as incorporating general climate change expectations and how to help our local forests adapt accordingly over the long term. We have also recently proposed that agroforestry be investigated as a potential tool for use in the interface zones around our communities to help simultaneously promote wildfire resilience and food security. While forest health may be inferred from the maintenance of the above identified values, we are currently in an era of epidemic bark beetle infestation, and this factor also plays a leading role in our planning process.

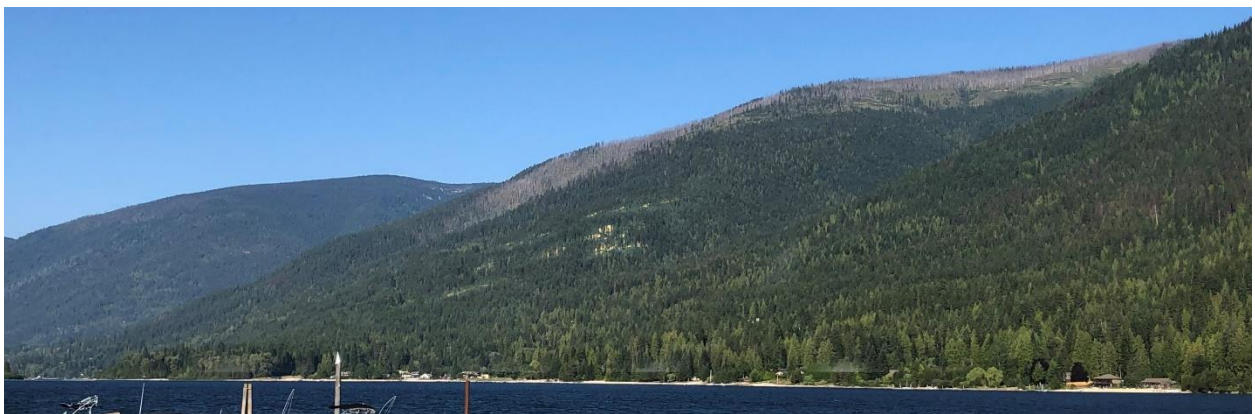
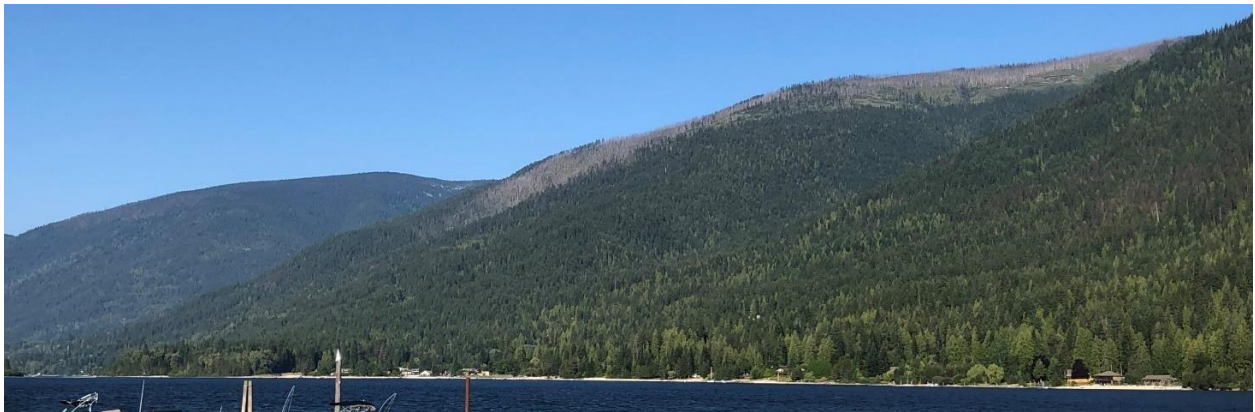
The following are a few of the primary planning considerations with respect to this particular project. While all forest values are considered for each proposal, generally speaking there will be a few for each site that are most difficult to reconcile and balance against timber harvesting. Site-specific analysis for this area yields the most pertinent values or considerations here (in no particular order) as:

Domestic Use and Community Watersheds – Airey Face has a number of domestic-use intakes utilizing springs and small watercourses on the lower portion of the landform. The majority of these do not have catchment areas with proposed harvesting in them. One point of diversion has harvesting proposed within its catchment. The area of proposed harvest is not connected to the intake with a continuous stream channel, and the harvest area is more than 500m above the intake. As such, no impacts are expected to this water source.

This harvest proposal has a very small overlap from Airey Face into the catchment for Sitkum Creek, a Community Watershed with a number of licenced domestic and irrigation intakes. The proposed area of activity is approximately 1.0ha of the 2700ha watershed, or 0.037%. While this is too small an area to cause changes to the flow regime of the creek, a geotechnical site review was undertaken to ensure there would not be adverse implications for terrain stability. The site review report recommends ensuring no drainage diversions cause water to flow from Airey Face onto the slopes above Sitkum Creek, but found no indicators that timber harvesting as proposed will significantly increase the low likelihood of landslides. This report can be found on our website.

Visual Quality – The identified visual quality objective (VQO) for the Airey Face landform is ‘Retention’. This VQO limits the amount of visible alteration from forestry activities to those which are difficult to see, small in scale, and natural in appearance. Visible alterations should generally not exceed 1.5% of the perspective view of the landform from a significant public viewpoint. While the harvest patches in this proposal are small and scattered across the landform, significant efforts have been made to ensure the openings will not be visible or will be difficult to see from several public viewpoints. Examples of Kalesnikoff’s strategy to achieve the desired result are:

- 1) Pre-harvest visual design, including:
 - Avoidance of rectilinear boundaries and geometric block shapes
 - Strategic location of harvest patches to utilize standing timber which will screen the openings from sight.
- 2) Utilization of LiDAR data and 3D modelling software to accurately predict the visual impacts from harvesting and/or road construction. Simulations are created for several significant public viewpoints and are used to improve on potential problem areas before harvest occurs and to ensure the post-harvest condition is consistent with expectations.
- 3) Prompt re-planting of harvested areas to promote the fastest possible green-up of small visible alterations.



The top image is a photograph taken from Crescent Beach, near Kokanee Creek Provincial Park. The lower image is a simulation of the expected appearance after completion of harvest.

Recreation – The Slabalanche downhill bike trail runs the ridge between Airey Face and the Sitkum Creek gully for about 2.3Km. This trail is not an established provincial recreation feature, but is well-used and maintained. The proposed harvest plan interacts with the trail in several locations, for a total of approximately 350m of the trail’s length. Kalesnikoff will mark the trail location in the field to ensure harvesting impacts are minimized to the trail bed, retain trees strategically in order to maintain as much shade as possible on the trail, and ensure the trail bed is cleared of any debris and safe to ride after harvest activities are complete.

Wildfire Risk Reduction (WRR) – CP K089 falls within the ‘Duhamel 1’ proposed treatment area identified within the RDCK Area F Community Wildfire Protection Plan (CWPP). Accordingly, this project has been referred to the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) for potential fuel reduction treatments post-harvest. A link to the RDCK website containing the CWPP can be found in the Summary section of this document. The FLNRORD program is a collaboration with the BC Wildfire Service, and treatments are intended to reduce forest fuel levels such that these areas will not support aggressive fire behaviour, while acting as anchor points for potential fire suppression efforts if necessary. The overall success of this program relies in large part on community engagement, and public feedback provided to Kalesnikoff will be shared with Ministry staff to help guide decisions as to whether and how these activities may be undertaken in the Airey Face area.

Forest Health – Douglas-fir bark beetle infestations throughout many of BC’s interior forests are reaching epidemic levels, and the West Kootenay region is seeing significant effects at this time. Recent Google Earth imagery and aerial reconnaissance shows forests on the north shore of Kootenay Lake’s West Arm are undergoing widespread damage. While forest licencees are working actively to suppress beetle populations, our steep terrain, diverse forest values, and the rapid spread of these insects across low to middle elevations is cause for concern. Local forests generally have a high proportion of susceptible timber from valley bottom to middle elevations throughout the region. The majority of Kalesnikoff’s harvest plans currently include measures to suppress beetle populations and salvage damaged timber. The Douglas-fir beetle has a one-year life cycle, with insects emerging in spring and summer to infest new trees annually. While the spread of this insect is not comparable in scale to that of the Mountain Pine Beetle, there are considerable impacts to various forest values including climate change and wildfire resilience, terrain stability, ecosystem and hydrological function, visual quality, and of course timber value. As Douglas-fir is generally a drought and fire-resilient species, large scale losses are detrimental to our ideal longer-term outlook for climate change resilience in our local forests. The harvest plan for Airey Face will include measures to trap and remove active insect populations in an attempt to reduce the spread of this forest pest.

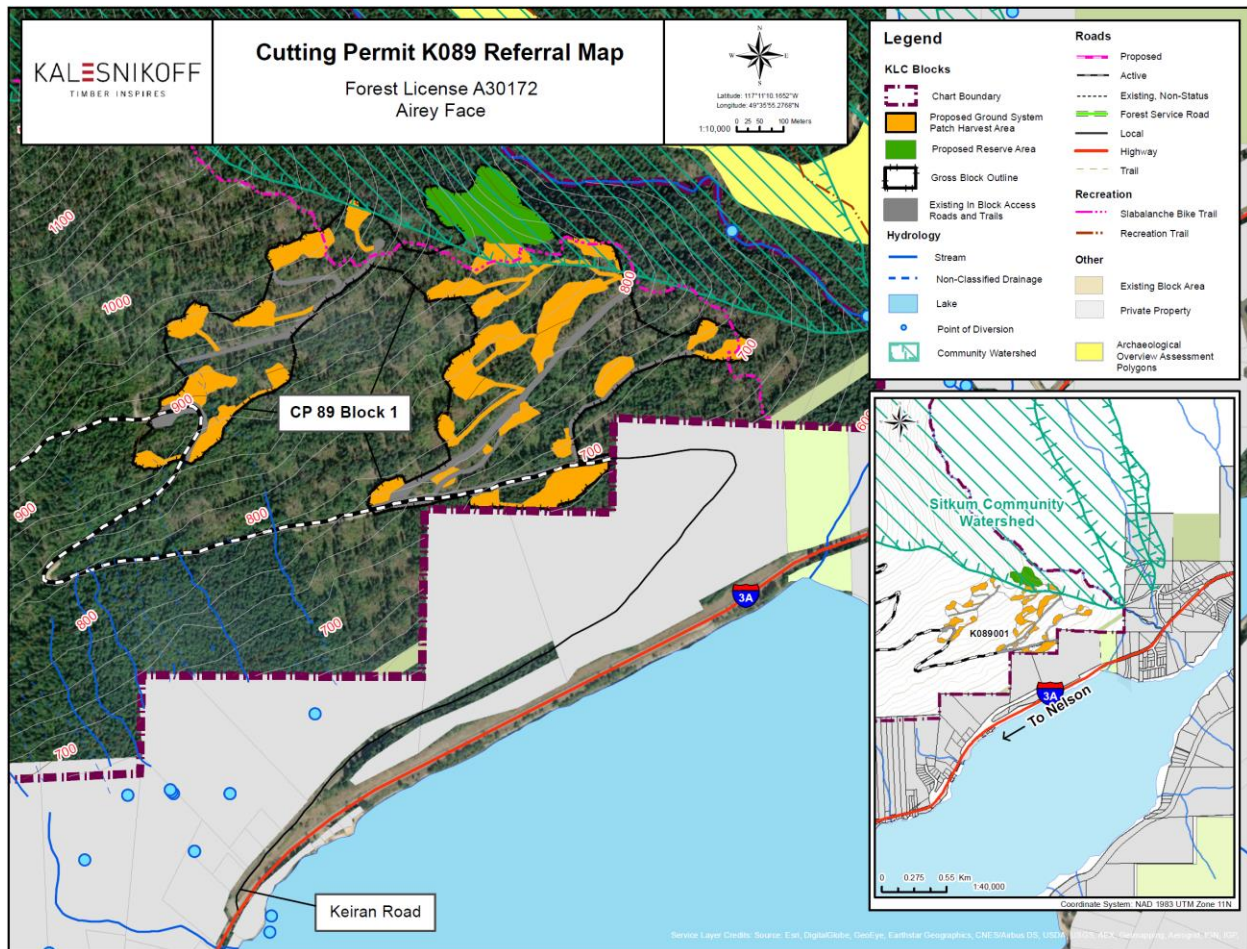


Adult Douglas-fir beetle, measuring approximately 6mm in length

Summary and Further Reading:

Block Summary and Referral Map:

Cutting permit K089 Block 1 consists of 23 small openings, using almost exclusively existing access infrastructure. Two existing old roads will require minor upgrades, and several new skid trails need to be established to access some of the patches. New skid trails will be rehabilitated after harvest. The site occurs within the ICHdw1 biogeoclimatic variant, on a relatively dry face unit. No streams occur within the harvest areas. Timber is generally dominated by mature Douglas-fir and Ponderosa pine, with some lesser representation of Western red cedar, Western hemlock, and Western white pine. Ponderosa pine will be the preferred species for retention, with the majority of larger trees left standing. Western white pine and deciduous species will also be preferentially retained wherever they occur within the harvest areas.



Public Engagement Summary:

Kalesnikoff is committed to transparent communications and engagement with Indigenous communities, local stakeholders and the public throughout the planning, road construction and harvest operations, and silviculture phases of our woodlands program. We will share information on our website and by email with those who provide their contact information. While engagement and referral periods for individual projects will have dates specified in order to receive timely feedback, the public is welcome to contact us at any time with questions, concerns, or comments related to our activities. We will strive to respond to individual queries in a prompt and comprehensive manner.

Further Reading, Links, and Related Information:

- **Regional District of Central Kootenay Community Wildfire Protection Plans**
<https://rdck.ca/EN/main/services/emergency-management/wildfires/community-wildfire-protection-plans.html>
- **Forest Enhancement Society of BC Website**
<https://www.fesbc.ca/>
- **FireSmart BC Website**
<https://firesmartbc.ca/>
- **Kalesnikoff Website, Public Stakeholder Engagement Page**
<https://www.kalesnikoff.com/sustainable-forest-stewardship>
- **Kootenay Resilience Website**
<http://www.kootenayresilience.org/>
- **Douglas-fir Beetle Fact Sheet, Forest Health Pamphlet #2**
<https://www.for.gov.bc.ca/rsi/foresthealth/pdf/dfbpamphlet.pdf>

Feedback Form:

Kalesnikoff is seeking feedback with respect to our harvest plan in the Airey Face area. We intend to begin operations within this area in 2021 or 2022.

We are seeking input from Indigenous peoples, local stakeholders and the public regarding what you think we should know and consider as we move forward in finalizing our plans. We'd like to hear from you about:

1. Infrastructure (buildings, roads, fencing, water-works, rec trails, etc.)
2. Natural features or important resource values not identified in our proposed plan.
3. Wildfire risk reduction in your community.
4. Other information you would like to receive.
5. How you would prefer to be kept informed.
6. Any other questions, comments or concerns you may have.

Topic 1: Existing and Proposed Infrastructure:

Consistent with our commitments, we will use modern road building practices with attention to drainage control and will monitor and maintain roads and structures on a regular basis.

- 1. Are there any key pieces of infrastructure or sites of interest (roads, buildings, fencing, water-works, rec trails etc.) that you would like to know more about or think we should know more about? (Ongoing road maintenance issues, siltation problems, seasonal issues, values at risk etc.) Is there any other infrastructure we should be aware of, or that you would like more information on?**

Topic 2: Natural or Significant Features

Kalesnikoff consistently adheres to government regulations and guidelines when planning and conducting forest harvesting activities, including those protecting or maintaining features of environmental, social or cultural significance. Whenever possible, we also respect significant local and informal features and landmarks of importance to the community.

2. Are there any key environmental, social or cultural features that were not identified in our proposed harvest plan that should be considered? Please provide a description and location of each feature.

Topic 3: Wildfire Risk Reduction

As our collective understanding of climate change and the increased potential for catastrophic wildfires grows, there is a need for further discussion as to how we may best approach and mitigate this hazard. Forest licences are viewed as a key component to this process as we hold tenure rights to harvest trees on Crown land and have a high level of interest in maintaining forest cover over the landscape through proactive forest health management. There is a growing consensus that Provincial funding will not be able to cover the entire cost of fuel reduction treatments due to the vast scope of the issue, and that some amount of timber harvesting near and adjacent to communities can help to reduce the wildfire risk. This type of work requires collaboration and careful consideration in the planning process. Kalesnikoff is committed to working with communities where we operate to come up with locally supported decisions around tackling this important issue. Please help move this conversation forward by giving us some input to consider.

3. Are you in favor of wildfire hazard mitigation treatments around your community? Do you own property that is at risk, or which may currently be in a condition that contributes to the risk? Please give us your thoughts.

Topic 4: Other information

We are committed to ongoing engagement and communications to help ensure local communities are aware of our harvest and related activities. We are open to continuing communication throughout and beyond our harvest planning processes.

4. What other information, if any, would you like to receive?

Topic 5: Preferred Method of Communication

5. Please check your preferred form of communication for this project:

You can get in touch with us at any time using the contact information listed below. Please let us know how you would like to receive any additional information from us. If you received this referral package via email and would rather not receive further updates for this project, you can be removed from our email list by checking the third box.

Email Kalesnikoff website I know enough. I don't want more information

If you chose "Email", please provide yours here: _____

Topic 6: Other Related Input

6. Please provide any other questions, comments or concerns you may have regarding our proposed harvest plans.

How Public Input Will Be Used:

Your feedback is important to us. Input received through this community consultation will be compiled, reviewed and considered by Kalesnikoff Lumber Company along with technical, environmental and social considerations in planning for this harvest. We'll do our best to alleviate any concerns and incorporate public input into our plans.

How you can return your Feedback Form to Us:

1. Mail your completed form to:
 - Woodlands Team, c/o Gerald Cordeiro
Kalesnikoff Lumber Company
PO Box 3000 Hwy 3A
Thrums, BC
V1N 4N1
2. Drop your Feedback Form off at our office:
 - 2090 Hwy 3A
Thrums, BC
3. Scan and email your completed Feedback Form to: referrals@kalesnikoff.com
4. Provide a written submission by email or regular mail (addresses above).

To sign-up for a mailing list:

Name: _____
Email address: _____
Phone # (optional): _____
Address (optional): _____
Postal Code (optional)*: _____

Please give us a brief description of your area of interest (community, neighborhood, watershed, etc.)

*If you don't wish to enter your address, you may still identify your neighborhood by entering a postal code only.